

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
27 May 2004 (27.05.2004)

PCT

(10) International Publication Number
WO 2004/043837 A1

(51) International Patent Classification⁷: **B65H 16/10**

(21) International Application Number:
PCT/IT2002/000721

(22) International Filing Date:
13 November 2002 (13.11.2002)

(25) Filing Language: Italian

(26) Publication Language: English

(71) Applicant (for all designated States except US): **FABIO PERINI S.P.A.** [IT/IT]; Zone Ind.le P.I.P. Mugnano Sud, I-55100 Lucca (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BETTI, Giulio** [IT/IT]; Via di Piaggia, 8, Vorno, I-55060 Capannori (IT). **MORELLI, Roberto** [IT/IT]; Via della Chiesa, 889, I-55056 S. Maria a Colle (IT). **BENVENUTI, Angelo** [IT/IT]; Via del Chiasso, 327, I-55100 Lucca (IT).

(74) Agents: **MANNUCCI, Michele et al.**; Via della Scala, 4, I-50123 Firenze (IT).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

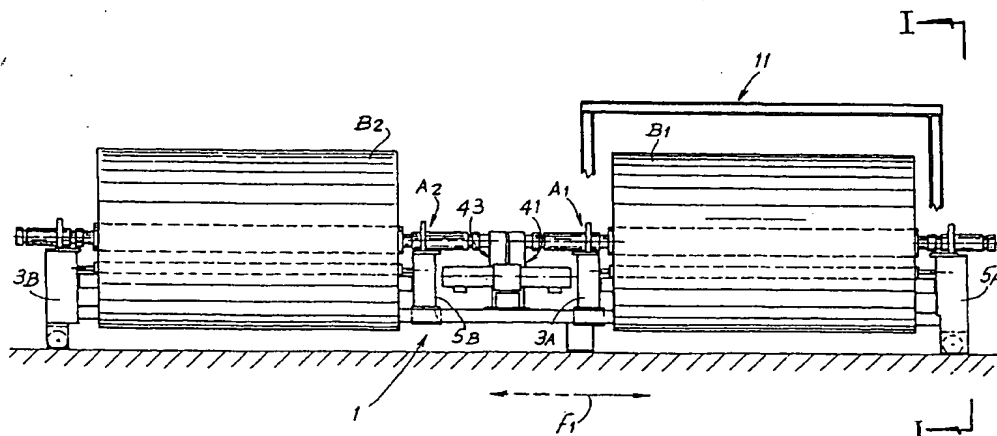
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: UNWINDING DEVICE FOR REELS OF WEB MATERIAL WITH DUAL DRIVE MECHANISM AND RELATIVE UNWINDING METHOD



(57) Abstract: The device comprises: supports (3A, 5A; 3B, 5B) to support at least a reel (B1) in an unwinding position; at least a peripheral drive mechanism which acts on the cylindrical surface of the reel being unwound and transmits peripherally to said reel a torque to draw it in rotation; and at least a center drive mechanism (41) which transmits centrally to said reel an auxiliary torque to draw it in rotation together with the torque transmitted by the peripheral drive mechanism.